```
     (FILE 'HOME' ENTERED AT 07:42:24 ON 28 NOV 2003)

     FILE 'REGISTRY' ENTERED AT 07:42:47 ON 28 NOV 2003
L1             STRUCTURE UPLOADED
L2              50 S L1 SSS SAM
L3            3407 S L1 SSS FULL

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 07:43:35 ON 28 NOV 2003

     FILE 'STNGUIDE' ENTERED AT 07:43:58 ON 28 NOV 2003

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 07:48:18 ON 28 NOV 2003
L4              42 S L3 AND (ALZHEIMER? OR ISCHEM?)
L5              42 DUP REM L4 (0 DUPLICATES REMOVED)
L6               7 S L3 AND (NEURIT? OR NEUROCYT?)
L7               7 DUP REM L6 (0 DUPLICATES REMOVED)

     FILE 'STNGUIDE' ENTERED AT 08:00:58 ON 28 NOV 2003

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 08:06:34 ON 28 NOV 2003

     FILE 'STNGUIDE' ENTERED AT 08:06:39 ON 28 NOV 2003

     FILE 'STNGUIDE' ENTERED AT 08:06:46 ON 28 NOV 2003

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 08:17:41 ON 28 NOV 2003

     FILE 'STNGUIDE' ENTERED AT 08:19:40 ON 28 NOV 2003
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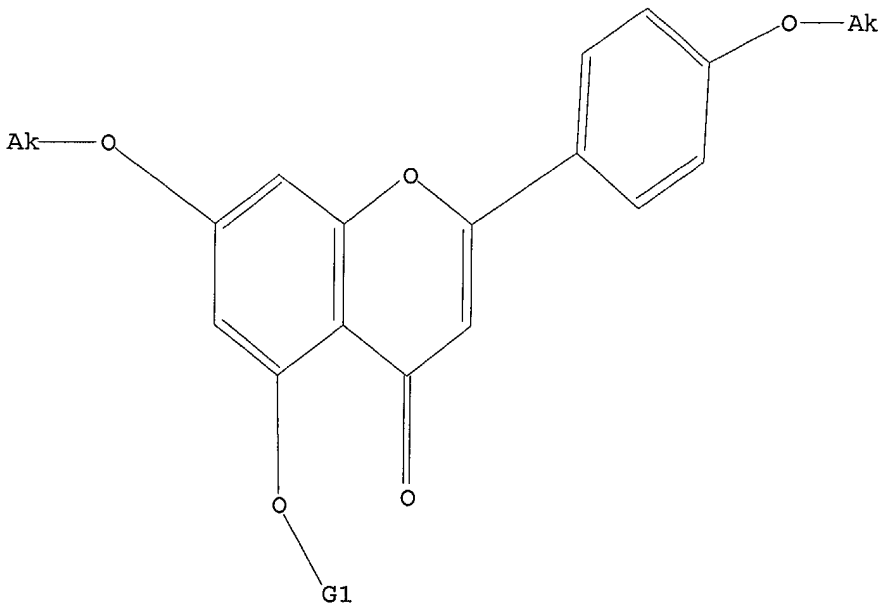
L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR




G1 H,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam
SAMPLE SEARCH INITIATED 07:43:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 751 TO ITERATE

100.0% PROCESSED 751 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 13376 TO 16664
PROJECTED ANSWERS: 2707 TO 4293

L2 50 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 07:43:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 14954 TO ITERATE

100.0% PROCESSED 14954 ITERATIONS 3407 ANSWERS
SEARCH TIME: 00.00.01

L3 3407 SEA SSS FUL L1

09/927,038

=> file hcaplus, uspatfull

```
FILE 'HCAPLUS' ENTERED AT 07:48:18 ON 28 NOV 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 07:48:18 ON 28 NOV 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d his

     (FILE 'HOME' ENTERED AT 07:42:24 ON 28 NOV 2003)

     FILE 'REGISTRY' ENTERED AT 07:42:47 ON 28 NOV 2003
L1             STRUCTURE UPLOADED
L2           50 S L1 SSS SAM
L3         3407 S L1 SSS FULL

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 07:43:35 ON 28 NOV 2003

     FILE 'STNGUIDE' ENTERED AT 07:43:58 ON 28 NOV 2003

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 07:48:18 ON 28 NOV 2003

=> s l3 and (alzheimer? or ischem?)
L4           42 L3 AND (ALZHEIMER? OR ISCHEM?)

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5           42 DUP REM L4 (0 DUPLICATES REMOVED)

=> s l3 and (neurit? or neurocyt?)
L6            7 L3 AND (NEURIT? OR NEUROCYT?)

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7            7 DUP REM L6 (0 DUPLICATES REMOVED)

=> d l7 abs ibib kwic hitstr 1-7

L7   ANSWER 1 OF 7  USPATFULL on STN
AB     A method and composition for the treatment of diabetic neuropathy is
       disclosed. The composition comprises a cold compounded mixture of a
       compound that promotes synthesis of nerve growth factor, an aldose
       reductase inhibitor and an antioxidant formulated in a pharmaceutically
       acceptable carrier. It has been found that this combination of active
       agents provides significant, effective relief of the symptoms of
       diabetic neuropathy, as well as at least partial recovery of lost
       neurological function in some cases. In view of the consensus in the art
       that effective combinations of various active agents have not been
       demonstrated to be effective for the treatment of diabetic neuropathy,
       the present invention provides a surprising and unexpected effect. In
       addition, the topical compositions of the present invention, when used
       in effective amounts to treat diabetic neuropathy, do not exhibit the
       severe side effects of many prior art compositions proposed for
       treatment of this ailment.

       In a second aspect, a method for the topical administration of a
       composition in accordance with the present invention for the treatment
```

of diabetic neuropathy is disclosed. In the method, an effective amount of the composition of the invention is topically administered to the areas of the body that have been adversely affected by the diabetic neuropathy on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms and at least some recovery of the damaged nerve tissues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2003:200519 USPATFULL |
| TITLE: | Method and composition for the topical treatment of diabetic neuropathy |
| INVENTOR(S): | Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003138504 | A1 | 20030724 |
| APPLICATION INFO.: | US 2003-369025 | A1 | 20030219 (10) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 2000-740811, filed on 21 Dec 2000, GRANTED, Pat. No. US 6555573 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103 | | |
| NUMBER OF CLAIMS: | 26 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 667 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

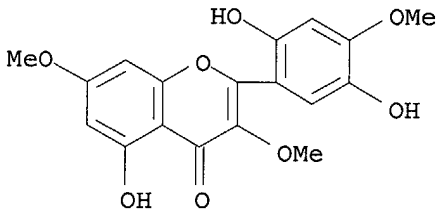
SUMM . . . is disclosed in U.S. Pat. No. 5,840,736 (Zelle et al.). In this method, pharmaceutical compositions for stimulating the growth of **neurites** in nerve cells comprising a neurotrophic amount of a compound and a nerve growth factor. These compositions may be administered. . .

IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs and precursors 70-18-8, Glutathione, biological studies 81-13-0, D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, .delta.-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 501-15-5, Epinin 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepitrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin-3-gallate 1200-22-2, .alpha.-Lipoic acid 1340-08-5, Citrin 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 10236-47-2, Naringin 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin

17680-84-1, Hispiduloside 17912-87-7, Myricitrin 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 73428-17-8, Manniflavanone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 102865-36-1, Methyl scutellarate 107091-01-0, Neriumoside 107646-82-2, Ethyl brevifolin carboxylate 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 167678-65-1 439217-49-9
(compns. contg. nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**, Chrysosplenoside-a
(compns. contg. nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

RN 549-17-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)




RN 6601-54-3 USPATFULL
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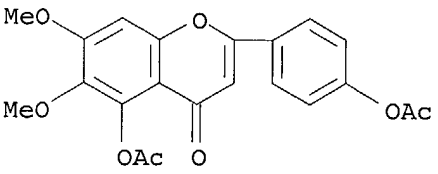
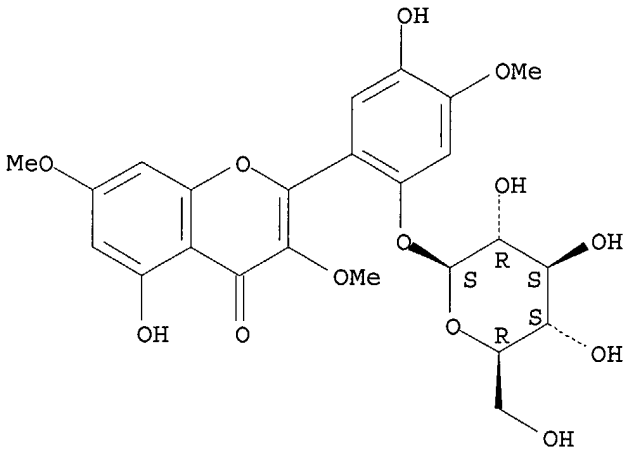



RN 23615-30-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[2-(.beta.-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




L7 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB Polyalkoxyflavonoids, esp. nobiletin and tangeretin, in the Rutaceae ext. are useful for control and relief of neurodegenerative diseases such as cerebral ischemia. Dried peel of Citrus unshiu was extd. with ethanol and nobiletin and tangeretin identified in the ext. by known method. Biol. activity of the Citrus unshiu ext. on the PC12 cell was shown.

ACCESSION NUMBER: 2002:148735 HCAPLUS
DOCUMENT NUMBER: 136:164277
TITLE: **Neurite** outgrowth factor in Rutaceae extract
INVENTOR(S): Ito, Hisatomi; Tamura, Shinya; Miyazaki, Toshiji
PATENT ASSIGNEE(S): Nagase and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2002060340 | A2 | 20020226 | JP 2000-248021 | 20000817 |
| US 2002040052 | A1 | 20020404 | US 2001-927038 | 20010809 |

PRIORITY APPLN. INFO.: JP 2000-248021 A 20000817
OTHER SOURCE(S): MARPAT 136:164277

TI **Neurite** outgrowth factor in Rutaceae extract

ST Rutaceae ext **neurite** outgrowth factor neurodegenerative disease; polyalkoxyflavonoid neurodegenerative disease control Rutaceae ext

IT Nervous system, disease
(degeneration; **neurite** outgrowth agent)

IT Brain, disease
(ischemia; **neurite** outgrowth agent)

IT Growth factors, animal
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**neurite** extension factors; **neurite** outgrowth agent)

IT Alzheimer's disease
Citrus depressa
Drugs
Health food

Rutaceae
Satsuma
(**neurite** outgrowth agent)

IT Flavonoids
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyalkoxyflavonoids; **neurite** outgrowth agent)

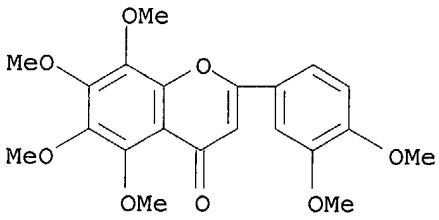
IT Orange
(sour; **neurite** outgrowth agent)

IT 64-17-5, Ethanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(**neurite** outgrowth agent)

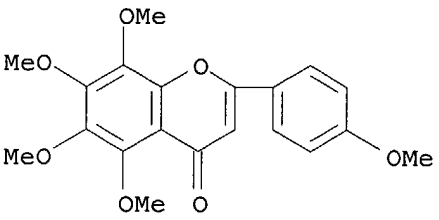
IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**neurite** outgrowth agent)

IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**neurite** outgrowth agent)

RN 478-01-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI) (CA INDEX NAME)




RN 481-53-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)




L7 ANSWER 3 OF 7 USPATFULL on STN

AB Compositions and a method for the treatment of diabetic neuropathy is disclosed. The compositions comprise a mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant, optionally formulated in a pharmaceutically acceptable carrier. This combination of active agents provides significant, effective relief of the symptoms of diabetic neuropathy, as well as at least partial recovery of lost neurological function in some

cases. In addition, the compositions of the present invention, when used in effective amounts to treat diabetic neuropathy, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment.

In a second aspect, a method for the administration of a composition in accordance with the present invention for the treatment of diabetic neuropathy is disclosed. In the method, an effective amount of the composition of the invention is administered on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms of diabetic neuropathy, as well as at least some recovery of the damaged nerve tissues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2002:295161 USPATFULL | | | |
| TITLE: | Compositions and methods for the treatment of diabetic neuropathy | | | |
| INVENTOR(S): | Rosenbloom, Richard, Elkins Park, PA, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2002165207 | A1 | 20021107 | |
| APPLICATION INFO.: | US 2001-847121 | A1 | 20010502 | (9) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | Knoble & Yoshida, LLC, Eight Penn Center, Suite 1350, 1628 John F. Kennedy Blvd., Philadelphia, PA, 19103 | | | |
| NUMBER OF CLAIMS: | 25 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| LINE COUNT: | 628 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . in U.S. Pat. No. 5,840,736 (Zelle et al.). In this method, pharmaceutical compositions are disclosed for stimulating the growth of **neurites** in nerve cells. The compositions include a neurotrophic amount of a compound and a nerve growth factor. These compositions may. . .

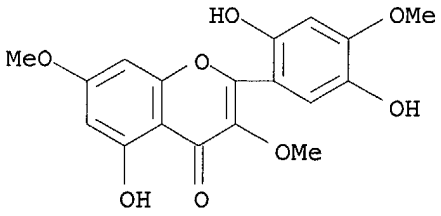
IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs and precursors 70-18-8, Glutathione, biological studies 81-13-0, D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, .delta.-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 501-15-5, Epinin 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepitrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin-3-gallate 1200-22-2, .alpha.-Lipoic acid 1340-08-5, Citrin 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin

5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 10236-47-2, Naringin 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7, Myricitrin 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 73428-17-8, Manniflavanone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 102865-36-1, Methyl scutellarate 107091-01-0, Neriumoside 107646-82-2, Ethyl brevifolin carboxylate 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 167678-65-1 439217-49-9
(compns. contg. nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**, Chrysosplenoside-a
(compns. contg. nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)




RN 6601-54-3 USPATFULL

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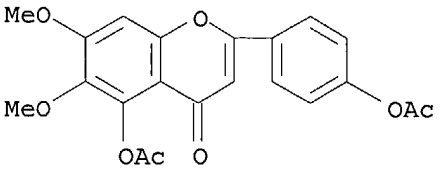
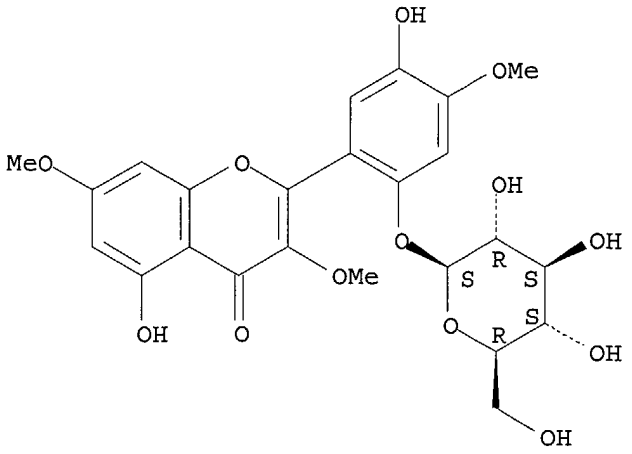



RN 23615-30-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[2-(.beta.-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




L7 ANSWER 4 OF 7 USPATFULL on STN

AB A method and composition for the treatment of diabetic neuropathy is disclosed. The composition comprises a cold compounded mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant formulated in a pharmaceutically acceptable carrier. It has been found that this combination of active agents provides significant, effective relief of the symptoms of diabetic neuropathy, as well as at least partial recovery of lost neurological function in some cases. In view of the consensus in the art that effective combinations of various active agents have not been demonstrated to be effective for the treatment of diabetic neuropathy, the present invention provides a surprising and unexpected effect. In addition, the topical compositions of the present invention, when used in effective amounts to treat diabetic neuropathy, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment,

In a second aspect, a method for the topical administration of a composition in accordance with the present invention for the treatment of diabetic neuropathy is disclosed. In the method, an effective amount of the composition of the invention is topically administered to the areas of the body that have been adversely affected by the diabetic neuropathy on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms and at least some recover of the damaged nerve tissues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 2002:214230 USPATFULL | | |
| TITLE: | Method and composition for the topical treatment of diabetic neuropathy | | |
| INVENTOR(S): | Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 2002115618 | A1 | 20020822 |
| | US 6555573 | B2 | 20030429 |
| APPLICATION INFO.: | US 2000-740811 | A1 | 20001221 (9) |

09/927,038

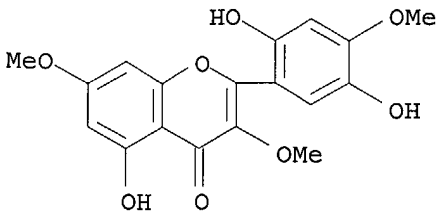
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 666
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . is disclosed in U.S. Pat. No. 5,840,736 (Zelle et al.). In this method, pharmaceutical compositions for stimulating the growth of **neurites** in nerve cells comprising a neurotrophic amount of a compound and a nerve growth factor. These compositions may be administered. . .

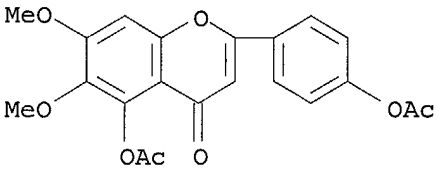
IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs and precursors 70-18-8, Glutathione, biological studies 81-13-0, D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, .delta.-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 501-15-5, Epinin 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepitrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin-3-gallate 1200-22-2, .alpha.-Lipoic acid 1340-08-5, Citrin 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 10236-47-2, Naringin 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7, Myricitrin 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 73428-17-8, Manniflavanone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 102865-36-1, Methyl scutellarate 107091-01-0, Neriumoside 107646-82-2, Ethyl brevifolin carboxylate 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 167678-65-1 439217-49-9
(compns. contg. nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**,
Chrysosplenoside-a
(compns. contg. nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

RN 549-17-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

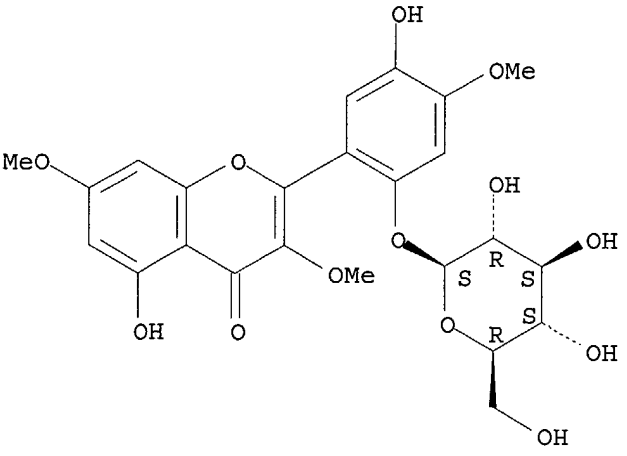



RN 6601-54-3 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)




RN 23615-30-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[2-(.beta.-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.




L7 ANSWER 5 OF 7 USPATFULL on STN
AB The present invention relates to methods for extending **neurites**

, using a composition containing a polyalkoxyflavonoid having a specific structure, especially nobiletin or tangeretin. It is found that also a composition containing an extract from a plant belonging to the citrus family has an activity to extend **neurites**. These compositions are useful to prevent and/or improve or treat neurodegeneration diseases such as Alzheimer's dementia and encephalic ischemia by accelerating extension of **neurites**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2002:72912 USPATFULL |
| TITLE: | Method for **neurite** outgrowth |
| INVENTOR(S): | Ito, Hisatomi, Kobe, JAPAN<br>Tamura, Shinya, Kobe, JAPAN<br>Miyazaki, Toshitsugu, Kobe, JAPAN |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2002040052 | A1 | 20020404 | |
| APPLICATION INFO.: | US 2001-927038 | A1 | 20010809 | (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | JP 2000-248021 | 20000817 |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | AMIN & TUROCY, LLP, 1900 EAST 9TH STREET, NATIONAL CITY CENTER, 24TH FLOOR,, CLEVELAND, OH, 44114 |
| NUMBER OF CLAIMS: | 15 |
| EXEMPLARY CLAIM: | 1 |
| LINE COUNT: | 701 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Method for **neurite** outgrowth

AB The present invention relates to methods for extending **neurites** , using a composition containing a polyalkoxyflavonoid having a specific structure, especially nobiletin or tangeretin. It is found that also a composition containing an extract from a plant belonging to the citrus family has an activity to extend **neurites**. These compositions are useful to prevent and/or improve or treat neurodegeneration diseases such as Alzheimer's dementia and encephalic ischemia by accelerating extension of **neurites**.

SUMM [0002] The present invention relates to methods for extending **neurites** of **neurocytes** and compositions having **neurite** extending effect. More specifically, the present invention relates to methods for preventing and/or improving or treating neurodegeneration diseases such as Alzheimer's dementia and cerebral ischemia by accelerating **neurite** extension, and compositions for extending **neurites** that are useful for these methods.

SUMM [0006] In recent years, neurotrophical factors secreted from **neurocytes** such as nerve growth factors (NGF) have been found to exhibit excellent effects on neurodegeneration diseases and have attracted public. . . . the peripheral nerves, and of magnocellular cholinergic neuron in the central nerves. An NGF also acts to prevent degeneration of **neurocytes** when the brain is damaged. In this regard, raising the NGF level in a living body seems to be effective. . .

SUMM . . . inhibitory effect. Japanese Laid-Open Patent Publication (Tokkai) No.6-31627 has reported that alcoholic extracts of ginseng have an activating effect on **neurocytes**, but the substance that has the activating effect has not been specified.

SUMM . . . Therefore, with the foregoing in mind, it is an object of the present invention to provide a method for extending **neurites** of **neurocytes** without any side effects, and a method for preventing and/or treating neurodegeneration diseases using novel compositions having **neurite** extending effect.

SUMM [0013] The present invention provides a method for extending **neurites** including administering a composition to a subject, the composition including a polyalkoxyflavonoid represented by Formula 1, and a pharmaceutically acceptable. . .

SUMM [0015] The present invention also provides a method for extending **neurites** including administering a composition to a subject, the composition including an extract of a plant belonging to the citrus family,. . .

SUMM [0019] The present invention further provides a method for extending **neurites** including bringing a composition in contact with **neurocytes**, the composition including a polyalkoxyflavonoid represented by Formula 1 and a physiologically acceptable carrier: ##STR3##

SUMM [0021] The present invention further provides a method for extending **neurites** including bringing a composition in contact with **neurocytes**, the composition including an extract of a plant belonging to the citrus family and a physiologically acceptable carrier.

SUMM . . . the present invention, the present invention provides a composition that is a pharmaceutical composition or a quasi-drug composition for extending **neurites** or for preventing and/or treating neurodegeneration diseases and contains a polyalkoxyflavonoid represented by Formula 1 or an extract from a. . .

SUMM [0026] The present invention also provides a composition that is a food composition for extending **neurites** or preventing and/or treating neurodegeneration diseases and contains a polyalkoxyflavonoid represented by Formula 1 or an extract from a plant. . .

SUMM [0028] The present invention further provides a composition that is a composition for cell treatment to extend **neurites** of **neurocytes** and contains a polyalkoxyflavonoid represented by Formula 1 or an extract from a plant belonging to the citrus family, and. . .

SUMM [0032] According to the present invention, a composition that is highly safe and has excellent **neurite** extending effect on cells can be provided, and therefore, a method for extending **neurites** and a method for preventing and/or treating neurodegeneration diseases are provided. In particular, it is effective to use a composition containing nobiletin or tangeretin that is a polyalkoxyflavonoid as an active ingredient. The composition for extending **neurites** of the present invention can be used as a pharmaceutical, a quasi-drug or a food, and are effective to extend **neurites** and to prevent and/or treat neurodegeneration diseases such as Alzheimer's dementia and encephalic ischemia.

SUMM [0034] It is known that PC12 cells derived from adrenal medulla pheochromocytoma of rats extend **neurites** in response to NGFs. The inventors of the present invention examined various substances having NGF-like activities, using an evaluation system. . . a result, the inventors of the present invention discovered that a polyalkoxyflavonoid having a specific chemical structure exhibits an excellent **neurite** extending effect.

SUMM [0035] In the present invention, "a composition for extending **neurites**" refers to a composition containing extracts of plants belonging to the citrus family or a composition containing a polyalkoxyflavonoid as. . .

SUMM . . . less, more preferably about 30% by weight or less. If the

polyalkoxyflavonoid content is less than 0.00001% by weight, the **neurite** extending effect may not reach the desired level. On the other hand, if the content exceeds 50% by weight, better. . .

SUMM [0056] By using the compositions of the present invention obtained in the above-described manner, it is possible to extend **neurites** or prevent and/or treat neurodegeneration diseases.

SUMM . . . for example in vitro, by culturing cells in a medium containing the composition for cell treatment of the present invention, **neurite** extension of the cells can be observed. In vivo, by orally administrating the pharmaceutical composition of the present invention, **neurite** extension is accelerated, and furthermore, the prevention and/or treatment of neurodegeneration diseases such as Alzheimer's dementia and encephalic ischemia can. . .

DETD . . . the above substances nobiletin and tangeretin was used without any further treatment as a test material A (composition for extending **neurites**).

DETD . . . microscopic observation was conducted with respect to the cells at 200 times magnification. The percentage of the cells with extended **neurites** (cells that have **neurites** longer than their diameter) to the total of more than 200 cells was calculated. The results are shown in Table. . .

DETD [0070] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that PC12 cells were transferred to the DEMEM-TIP medium. . .

DETD [0073] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that the extract from Citrus depressa was used without. . .

DETD [0074] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 3 except that PC12 cells were transferred to the DEMEM-TIP medium. . .

DETD [0077] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that the extract from Citrus aurantium was used without. . .

DETD [0078] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 5 except that PC12 cells were transferred to the DEMEM-TIP medium. . .

DETD [0079] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that nobiletin obtained in Example 1 was used without. . .

DETD [0080] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except for using nobiletin obtained in Example 1 was used. . .

DETD [0081] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that nobiletin obtained in Example 1 was used without. . .

DETD [0082] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that tangeretin obtained in Example 1 was used without. . .

DETD [0083] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except tangeretin obtained in Example 1 was used without any. . .

DETD [0084] The percentage of the cells with extended **neurites** was calculated in the same as in Example 1 except that PC12 cells were transferred to the DEMEM-TIP medium that. . .

DETD [0085] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that dibutyl cyclic (manufactured by Sigma Inc.) that has been reported to have **neurite** extending effect (Neurochem. Int. 33, 503, (1999)) was used without any further treatment as a test material F instead of. .

DETD [0086] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that isobutylmethylxanthine (manufactured by Sigma Inc.) that has been reported to have **neurite** extending effect (J. Neurobiol. 19 (8), 681, (1988)) was used without any further treatment as a test material G instead. . . Ratio of of the ratio of

| | Active ingredient in the test material | a composition for extending **neurites** of the present invention in the medium | the cells with extended **neurites** (%) | the cells with extended **neurites** to control (Com. Ex. 1).sup.1) |
|---|---|---|---|---|
| Ex. 1 | extract of immature peel of Citrus. . . | 10 .mu.g/ml 100 .mu.M | 10.2 11.8 | 2.9 3.4 |
| Ex. 3 | xanthine | | | |

.sup.1) Relative value is the value obtained by dividing "the percentage of the cells with extended **neurites**" by the control value (Comparative Example 1).

DETD . . . of Comparative Example 1, all of the test materials A to E used in Examples 1 to 11 have excellent **neurite** extending effect to cells. According to the results of Examples 1 to 11, the higher concentration the test materials that are added to the cells have, the greater the **neurite** extending effect is. These values are equivalent or more than the results of test materials F and G known to have **neurite** extending activity in Comparative Examples 2 and 3. From this regard, it is evident that all of the test materials A to E used in Examples 1 to 11 are useful as compositions for extending **neurites**.

CLM What is claimed is:

1. A method for extending **neurites** comprising administering a composition to a subject, the composition comprising a polyalkoxyflavonoid represented by Formula 1, and a pharmaceutically acceptable. . .

3. A method for extending **neurites** comprising administering a composition to a subject, the composition comprising an extract from a plant belonging to the citrus family,. . .

11. A method for extending **neurites** comprising bringing a composition in contact with **neurocytes**, the composition comprising a polyalkoxyflavonoid represented by Formula 1, and a physiologically acceptable carrier: ##STR13## wherein R.sub.1 is H or. . .

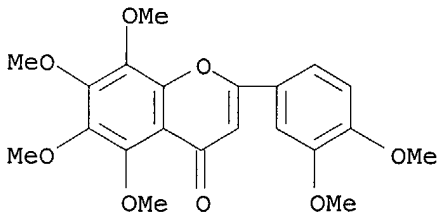
13. A method for extending **neurites** comprising bringing a composition in contact with **neurocytes**, the composition comprising an extract from a plant belonging to the citrus family, and a physiologically acceptable carrier.

IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
(neurite outgrowth agent)

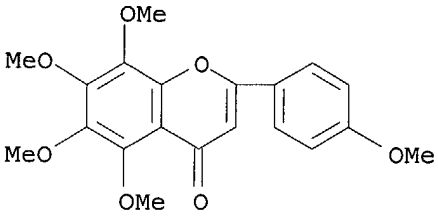
IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
(neurite outgrowth agent)

RN 478-01-3 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI) (CA INDEX NAME)



RN 481-53-8 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 6 OF 7 USPATFULL on STN
AB A method is provided for therapeutic use of a class of compounds that are effective in protecting nerve cells from deterioration and cell death arising from degenerative disease, trauma or aging and may be used to achieve a similar effect in male and female subjects with minimal adverse side effects. The method comprises administering a therapeutically effective dose of a natural or synthetic bioflavonoid that acts as an MAPK cascade antagonist. Examples of bioflavonoids that may be used in the present method are apigenin and 2-(2'-amino-3' methoxyphenyl)-oxanaphthalen-4-one (PD098059).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2002:239045 USPATFULL |
| TITLE: | Neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors |
| INVENTOR(S): | Baskys, Andrius, 10 Cool Brook, Irvine, CA, United States 92612 |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 6451837 | B1 | 20020917 | |
| APPLICATION INFO.: | US 2000-653065 | | 20000901 | (9) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 1999-151955P | 19990901 | (60) |

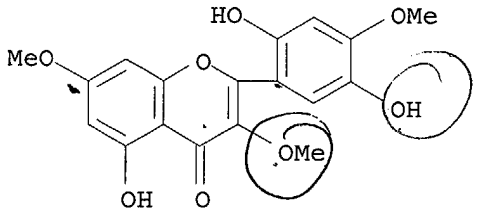
| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | GRANTED |
| PRIMARY EXAMINER: | Gitomer, Ralph |
| ASSISTANT EXAMINER: | Khare, Devesh |
| LEGAL REPRESENTATIVE: | Cummings & Lockwood LLC |
| NUMBER OF CLAIMS: | 11 |

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 797
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM Alzheimer's Disease (AD) is a progressive neurodegenerative disease which is histologically characterized by an accumulation of **neuritic** plaques and neurofibrillary tangles and by neuron death. A major component of these **neuritic** plaques is the .beta.-protein, which is derived from a precursor protein called the .beta.-amyloid precursor protein (APP). The .beta.-amyloid protein. . .

IT 90-19-7, Rhamnetin 117-39-5, Quercetin 153-18-4, Rutin 480-19-3, Isorhamnetin 482-36-0, Hyperin 482-38-2, Kaempferitrin 491-70-3, Luteolin 520-18-3, Pelargidenon 520-36-5 522-12-3, Quercitrin **549-17-7**, Oxyayanin-A 578-74-5, Cosmosiine 6601-62-3, Cirsimaritin 16290-07-6, Kaempferol-7-glucoside 17306-46-6, Rhoifolin 18003-33-3, 6-Hydroxyluteolin 21637-25-2, Isoquercitrin 21967-41-9, Baicalin 26046-94-6, Plantaginin 26544-34-3, Apiin 167869-21-8, PD098059 461015-55-4, Cossmetiin 461015-56-5, Sorbavin 461015-71-4, Afrelin
(neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors)

IT **549-17-7**, Oxyayanin-A
(neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors)

RN 549-17-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)




L7 ANSWER 7 OF 7 USPATFULL on STN
AB Polyhydroxylated aromatic compounds, and compositions containing them, are useful for the treatment of amyloidosis, especially Alzheimer's disease, and for the treatment of diseases characterized by .alpha.-synuclein fibril formation, especially Lewy body disease and Parkinson's disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2001:218540 USPATFULL
TITLE: Polyhydroxylated aromatic compounds for the treatment of amyloidosis and alpha-synuclein fibril diseases
INVENTOR(S): Castillo, Gerardo M., Seattle, WA, United States
Choi, Paula Y., Bothell, WA, United States
Snow, Alan D., Lynnwood, WA, United States

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2001047032 | A1 | 20011129 |

APPLICATION INFO.: US 2000-748748 A1 20001226 (9)

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1999-173958P | 19991230 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
LINE COUNT: 1536
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . example, Alzheimer's disease patients in mid-to-late stage disease have abundant A.beta.-containing amyloid deposits in their brains as part of both **neuritic** plaques and cerebrovascular amyloid deposits. A compound capable of causing disassembly/disruption of pre-existing amyloid deposits would be advantageous for use. . .

IT 51-61-6, Dopamine, biological studies 59-92-7, Dopa, biological studies 72-48-0, Alizarin 77-95-2, Quinic acid 81-61-8, Quinalizarin 82-12-2, Rufigallol 82-83-7, Puberulonic acid 83-85-2, Fuscin 87-88-7, Chloranilic acid 90-18-6, Quercetagetin 90-19-7, Rhamnetin 99-11-6, Citrazinic acid 99-23-0, Puberulic acid 117-12-4, Anthrarufin 117-39-5, Quercetin 118-76-3, Rhodizonic acid 121-79-9, Propyl gallate 128-68-7, Phenicin 148-25-4, Chromotropic acid 149-45-1, Tiron 149-91-7, Gallic acid, biological studies 152-84-1, Ruberythric acid 153-18-4, Rutin 154-23-4, Catechin 301-19-9, Robinin 305-01-1, Esculetin 319-89-1, Tetroquinone 437-50-3, Gentisin 446-72-0, Genistein 475-25-2, Hematein 475-54-7, Oosporein 478-43-3, Rhein 478-60-4, Citromycetin 480-15-9, Datiscetin 480-16-0, Morin 480-17-1, Leucocyanidin 480-40-0, Chrysin 480-44-4, Acacetin 481-74-3, Chrysophanic acid 484-89-9, Fumigatin 486-35-1, Daphnetin 489-32-7, Icariin 490-46-0, Epicatechin 491-45-2, Phloroglucide 491-50-9, Quercimeritrin 491-58-7, Chrysarobin 491-67-8, Baicalein 491-70-3, Luteolin 497-75-6, Dioxethedrine 499-14-9, Chondrosine 501-15-5, Deoxyepinephrine 517-82-8, Echinochrome a 517-88-4, Alkannin 517-92-0, Chrysamminic acid 518-82-1, Emodin 519-34-6, Maclurin 520-18-3, Kaempferol 520-27-4, Diosmin 520-34-3, Diosmetin 520-36-5, Apigenin 524-30-1, Fraxin 528-21-2, Gallacetophenone 528-48-3, Fisetin 528-50-7, Cellobiose 528-53-0, Delphinidin 528-58-5, Cyanidin 529-53-3, Scutellarein 531-58-8, Cichoriin 533-73-3, 1,2,4-Benzenetriol 536-08-3, Digallic acid 548-80-1, Chromotrope 2B 548-83-4, Galangin 550-24-3, Embelin 552-21-6, Methylenedigallic acid 552-58-9, Eriodictyol 568-02-5, Alizarin blue 568-93-4, Alizarin orange 569-77-7, Purpurogallin 574-84-5, Fraxetin 577-33-3, Anthrarobin 578-74-5, Apigetrin 602-64-2, Anthragallol 602-92-6, Dibromogallic acid 618-73-5, Gallamide 831-61-8, Ethyl gallate 970-73-0, Gallocatechin 970-74-1, Epigallocatechin 1143-38-0, Anthralin 1260-17-9, Carminic acid 1397-77-9, Actinorhodine 1403-56-1, Fomecin a 1404-52-0, Rhodomycin b 1471-96-1, Echinochrome a 1562-85-2, Gallocyanine 1702-77-8, Fusarubin 1927-04-4, 5-Hydroxydopamine 2103-64-2, Gallein 2611-67-8, Cyanidin 3,5-diglucoside **2798-20-1**, Gardenin b 3101-51-7, Ergoflavin 4589-33-7, Bostrycoidin 5908-63-4, Baptigenin 7084-24-4, Cyanidin 3-glucoside **7085-55-4**, Troxerutin 10140-70-2, Curvularin 13405-60-2, .beta. Glucogallin 15979-35-8, Laccaic acid a 16545-11-2, Guamecycline 16790-41-3, Fomecin b 17249-00-2, Laccaic acid b 18376-31-3, Cyanidin 3-sophoroside 18499-84-8, Laccaic acid d 18499-92-8, Kermesic acid 18719-76-1,

Cyanidin 3-rhamnoglucoside 19879-06-2, Granaticin 20004-62-0, Resistomycin 20725-03-5, Fustin 20830-81-3, Daunorubicin **21187-73-5**, Gardenin a 21637-25-2, Isoquercitrin 23214-92-8, Doxorubicin 23241-56-7, Laccaic acid c 23444-65-7, Alkannin 23651-95-8, Droxidopa 23666-50-4, Rhodomycin a 27267-69-2, Collinomycin 27613-78-1, Alizarinsulfonic acid 28860-95-9, Carbidopa **29202-00-4**, Gardenin d **29550-05-8**, Gardenin c **29550-07-0**, Gardenin e 35595-03-0, Centaurein 36413-60-2, Quinic acid 38820-68-7, Cyanidin 3-sophoroside 42927-70-8, Apiose 50935-04-1, Carubicin 52479-85-3, Exifone 53318-36-8, .alpha. Glucogallin 67227-56-9, Fenoldopam 71628-96-1, Menogaril 75775-33-6, Purpurin 80455-68-1, Fredericamycin a 97689-87-7, Tunichrome B1 349584-11-8
(polyhydroxylated arom. compds. for the treatment of amyloidosis and .alpha.-synuclein fibril diseases)

IT **2798-20-1**, Gardenin b **7085-55-4**, Troxerutin **21187-73-5**, Gardenin a **29202-00-4**, Gardenin d **29550-05-8**, Gardenin c **29550-07-0**, Gardenin e
(polyhydroxylated arom. compds. for the treatment of amyloidosis and .alpha.-synuclein fibril diseases)

RN 2798-20-1 USPATFULL

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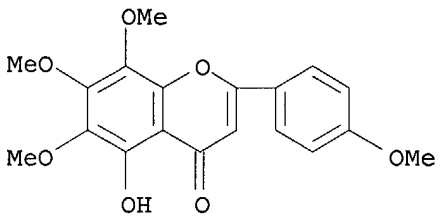


RN 7085-55-4 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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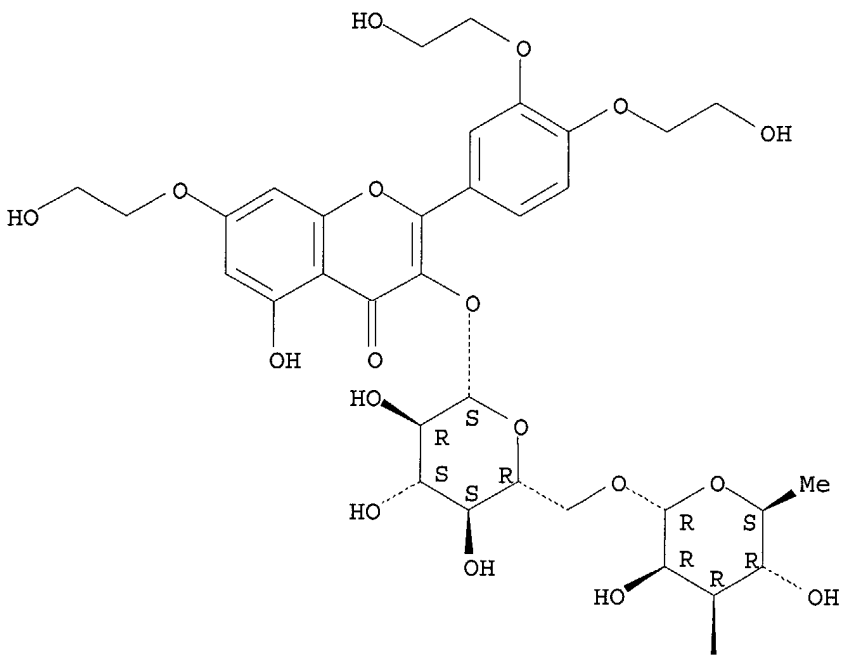

PAGE 2-A

RN 21187-73-5 USPATFULL
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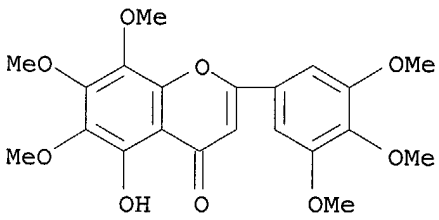

RN 29202-00-4 USPATFULL
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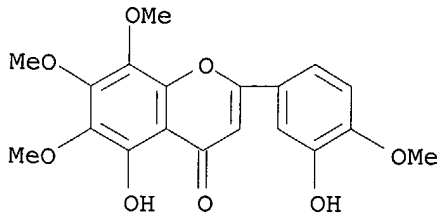

RN 29550-05-8 USPATFULL
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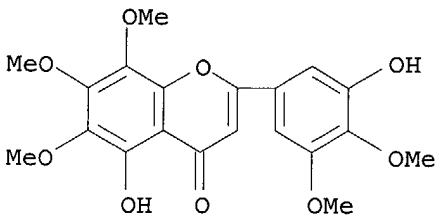

RN 29550-07-0 USPATFULL
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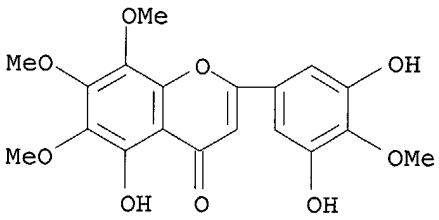

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